

Bio-10-Q2W8-Quarter 2 Rvision Qs.Bank

Multiple Choice

Identify the choice that best completes the statement or answers the question.

- _____ 1. The primitive Earth atmosphere is hypothesized to have consisted mostly of _____.
 - a. oxygen, nitrogen, and water vapor
 - b. hydrogen, methane, ammonia, and water vapor
 - c. amino acids, ATP, carbohydrates, and oxygen
 - d. none of these
- _____ 2. Since the 1950s, experiments have been conducted that lead scientists to conclude that life may have originated _____.
 - a. spontaneously as originally thought
 - b. in small pools of water where amino acids could be concentrated
 - c. in other parts of the universe
 - d. when prokaryotes joined together to make the first eukaryotic cell
- _____ 3. Scientists agree that two developments must have occurred for life to come into being: the formation of simple organic molecules important to life and _____.
 - a. development of prokaryotic cells in early oceans
 - b. organization of molecules into complex organic molecules
 - c. appearance of amino acids, monosaccharides, and lipids
 - d. an atmosphere rich in water vapor, oxygen, and ATP
- _____ 4. Before biogenesis became an accepted cornerstone of biology, it was widely accepted that _____.
 - a. living things could arise spontaneously from other living things
 - b. Francesco Redi and Louis Pasteur would be unable to test the current beliefs
 - c. flies could be produced only from other flies
 - d. maggots were the immature offspring of flies
- _____ 5. Humans are thought to have evolved during the _____ Era.
 - a. Cenozoic
 - b. Paleozoic
 - c. Mesozoic
 - d. Precambrian
- _____ 6. The Geologic Time Scale begins at the formation of Earth approximately _____ years ago.
 - a. 4.6 thousand
 - b. 4.6 million
 - c. 46 million
 - d. 4.6 billion
- _____ 7. Which of the following statements are true about fossils?
 - a. Fossils are usually found in sedimentary rock layers.
 - b. There are many different ways that fossils can be formed.
 - c. Fossil insects that were trapped in ice or hardened into amber.
 - d. all of these
- _____ 8. Which of the following fossils are not found in sedimentary rock?
 - a. imprints
 - b. frozen mammoths
 - c. amber
 - d. petrified wood
- _____ 9. While looking for fossils on an eroded hillside, you discover fossil coral and fish in one layer. In a layer just above, you find the fossil imprint of a fern frond and some fossil moss. Assuming the rock has not been disturbed, which of the following is the most probable conclusion?
 - a. The area had been a sea until recent times.
 - b. A forest had once grown there but had become submerged by water.
 - c. A sea had been replaced by land in ancient times.
 - d. A saltwater sea had changed to a freshwater lake in ancient times.

- ____ 10. According to one theory, the first prokaryotes probably obtained their food ____.
- through the synthesis of organic molecules from inorganic molecules
 - through a combination of photosynthesis and aerobic respiration
 - by eating carbohydrates formed by autotrophs
 - by consuming organic molecules available in their environment
- ____ 11. Which group of organisms is believed to have been the earliest to evolve?
- land plants
 - cyanobacteria
 - aquatic dinosaurs
 - mammals
- ____ 12. Which fact is the basis for using the fossil record as evidence that evolution has taken place?
- In undisturbed layers of rock strata, the older fossils are found in the deeper layers.
 - There are fossils of all life-forms to be found in rock layers.
 - All fossils were formed at the same time.
 - Fossils have been shown to provide a complete record of human evolution.
- ____ 13. A clear fish imprint in a rock indicates that the rock is probably ____.
- volcanic
 - sedimentary
 - metamorphic
 - igneous
- ____ 14. Urey and Miller subjected water, ammonia, methane, and hydrogen to heating and cooling cycles and jolts of electricity in an attempt to ____.
- determine how the dinosaurs became extinct
 - form complex organic compounds
 - determine the age of microfossils
 - find out how ozone forms in the atmosphere
- ____ 15. Which event contributed most directly to the evidence of aerobic organisms?
- an increase in the concentration of methane in the ancient atmosphere
 - a decrease in the sun's light intensity
 - the presence of organisms able to carry on photosynthesis
 - an increase in the number of organisms carrying on fermentation

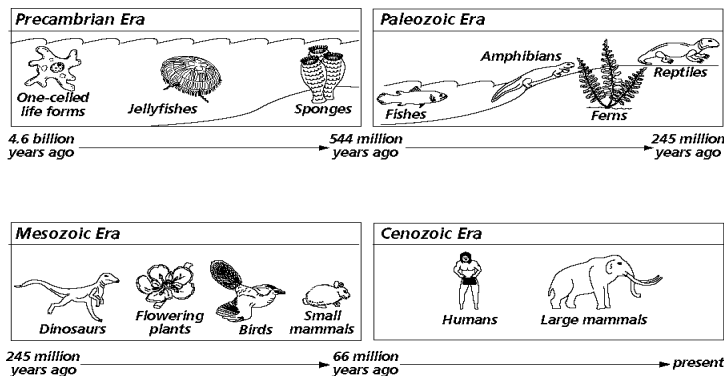


Figure 14-4

- ____ 16. According to Figure 14-4, what was the earliest form of multicellular life on Earth?
- fish
 - invertebrates
 - land plants
 - reptiles
- ____ 17. According to Figure 14-4, the correct chronological order of organisms as they develop are ____.
- birds, dinosaurs, jawed fish, prokaryotes
 - dinosaurs, jawed fish, birds, prokaryotes
 - jawed fish, dinosaurs, prokaryotes, birds
 - prokaryotes, jawed fish, dinosaurs, birds

- ____ 18. According to Figure 14-4, in how many eras have mammals existed?
- a. 2
 - b. 4
 - c. 5
 - d. 7
- ____ 19. Hawaiian honeycreepers are a group of birds with similar body shape and size. However, they vary greatly in color and beak shape. Each species occupies its own niche and is adapted to the foods available in its niche. The evolution from a common ancestor to a variety of species is an example of ____.
- a. divergent evolution
 - b. cross-pollination
 - c. vegetative propagation
 - d. convergent evolution
- ____ 20. The flying squirrel of North America closely resembles the flying phalanger of Australia. They are similar in size and have long, bushy tails and skin folds that allow them to glide through the air. The squirrel is a placental mammal, while the phalanger is a marsupial. These close resemblances, even though genetically and geographically separated by great distances, can best be explained by ____.
- a. convergent evolution
 - b. divergent evolution
 - c. spontaneous generation
 - d. vestigial structures
- ____ 21. Within a decade of the introduction of a new insecticide, nearly all of the descendants of the target pests were immune to the usual-sized dose. The most likely explanation for this immunity to the insecticide is that ____.
- a. eating the insecticide caused the bugs to become resistant to it
 - b. eating the insecticide caused the bugs to become less resistant to it
 - c. it destroyed organisms that cause disease in the insects, thus allowing them to live longer
 - d. the pests developed physiological adaptations to the insecticide
- ____ 22. Natural processes such as speciation and gradualism provide the genetic basis for ____.
- a. evolution
 - b. spontaneous generation
 - c. biogenesis
 - d. sexual reproduction
- ____ 23. Structures that have a similar evolutionary origin and structure but are adapted for different purposes, such as a bat wing and a human arm, are called ____.
- a. embryological structures
 - b. analogous structures
 - c. homologous structures
 - d. homozygous structures
- ____ 24. Natural selection can best be defined as the ____.
- a. survival of the biggest and strongest organisms in a population
 - b. elimination of the smallest organisms by the biggest organisms
 - c. survival and reproduction of the organisms that occupy the largest area
 - d. survival and reproduction of the organisms that are genetically best adapted to the environment
- ____ 25. A pattern of evolution that results when two unrelated species begin to appear similar because of environmental conditions is ____.
- a. disruptive selection
 - b. convergent evolution
 - c. directional selection
 - d. divergent evolution
- ____ 26. The average individuals of a population are favored in ____ selection.
- a. directional
 - b. stabilizing
 - c. disruptive
 - d. natural
- ____ 27. In ____ selection, individuals with both extreme forms of a trait are at a selective advantage.
- a. directional
 - b. stabilizing
 - c. disruptive
 - d. natural
- ____ 28. What is the movement of genes into and out of a gene pool called?
- a. random mating
 - b. nonrandom mating
 - c. gene flow
 - d. direct evolution
- ____ 29. Which of the following lines of evidence for evolution is indirect?
- a. pesticide resistance
 - b. observed allele frequency changes
 - c. fossils
 - d. all of these

- ____ 30. Which answer BEST shows an animal's adaptation to the tropical rain forest?
- camouflage in a tree frog
 - the long neck of a giraffe
 - an elephant's long trunk
 - migration of birds in winter
- ____ 31. A mechanism of Darwin's proposed theory is ____.
- artificial selection
 - evolution
 - variation
 - all of these
- ____ 32. The founder of modern evolution theory is considered to be ____.
- Charles Darwin
 - Alexander Oparin
 - Stephen Jay Gould
 - Lynn Margulis
- ____ 33. Which combination of characteristics in a population would provide the greatest potential for evolutionary change?
- small population, few mutations
 - small population, many mutations
 - large population, few mutations
 - large population, many mutations
- ____ 34. The theory of continental drift hypothesizes that Africa and South America slowly drifted apart after once being a single landmass. The monkeys on the two continents, although similar, show numerous genetic differences. Which factor is probably the most important in maintaining these differences?
- comparative anatomy
 - comparative embryology
 - geographic isolation
 - fossil records
- ____ 35. Which of the following is not a factor that causes changes in the allelic frequencies of individuals in a population?
- stabilizing selection
 - directional selection
 - random selection
 - disruptive selection
- ____ 36. When checking shell color for a species of snail found only in a remote area seldom visited by humans, scientists discovered the distribution of individuals that is shown in the graph in Figure 15-1. Based on the information shown in the graph, the snail population is undergoing ____.

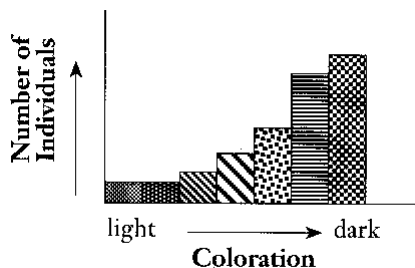


Figure 15-1

- stabilizing selection
 - disruptive selection
 - artificial selection
 - directional selection
- ____ 37. What type of adaptation is shown in Figure 15-4?

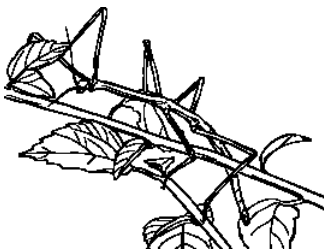


Figure 15-4

- mimicry
 - camouflage
 - artificial selection
 - homologous structure
- ____ 38. The structures shown in Figure 15-5 are ____.

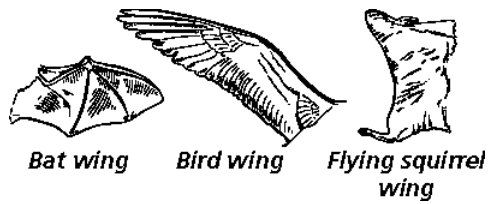


Figure 15-5

- a. homologous
- b. heterologous
- c. analogous
- d. vestigial

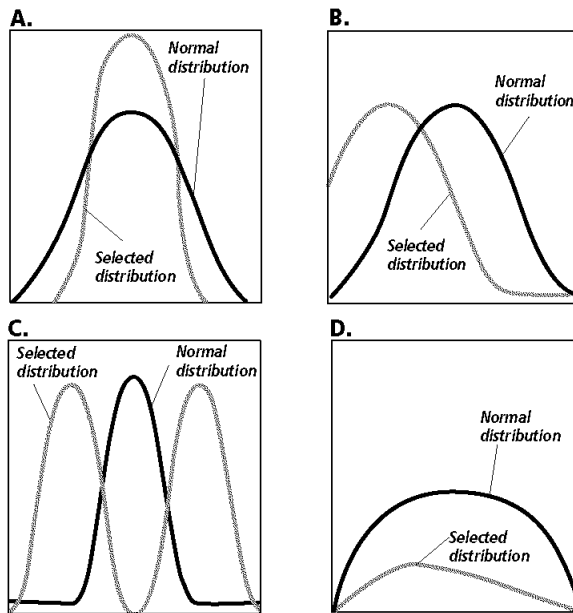


Figure 15-6

- ____ 39. Which type of natural selection shown in Figure 15-6 would favor giraffes that need to reach the tallest branches to eat?
- a. A
 - b. B
 - c. C
 - d. D

____ 40. Why might the beak of the Akialoa, pictured in Figure 15-7, developed this way?

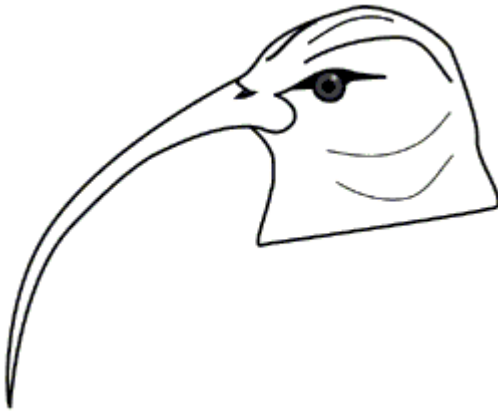


Figure 15-7

- a. to reach nectar in flowers
 - b. to dig through tree bark for insects
 - c. to scoop up fish
 - d. to crack open seeds
- ____ 41. A system for naming species in which two words are used to name an organism is _____.
a. binomial nomenclature
b. dichotomous keying
c. cladistics
d. fan diagramming
- ____ 42. The placing of information or objects into groups based on certain similarities is _____.
a. biochemical analysis
b. classification
c. phylogeny
d. speciation
- ____ 43. A heterotrophic eukaryote associated with the decomposition of dead organisms is a(n) _____.
a. bacterium
b. herbivore
c. fungus
d. protist
- ____ 44. A group of related classes of plants is a _____.
a. database
b. kingdom
c. division
d. taxon
- ____ 45. The science of grouping and naming organisms is _____.
a. classification
b. phylogeny
c. nomenclature
d. taxonomy
- ____ 46. The method used to construct a hypothetical evolutionary tree is _____.
a. biochemistry
b. cladistics
c. DNA sequencing
d. statistical analysis
- ____ 47. Biologists use _____ to create a cladogram.
a. derived traits
b. behavioral
c. discretionary
d. pedigrees
- ____ 48. Which of the bacteria is the cause of pneumonia?
a. staphylococci
b. rickettsia
c. Treponema pallidum
d. streptococcus pneumoniae
- ____ 49. Bacteria are used in _____.
a. farming
b. the medical industry
c. the food industry
d. all of these
- ____ 50. A structure in some bacteria that is resistant to adverse environmental factors is a(n) _____.
a. prophage
b. endospore
c. autotroph
d. coccus

- ____ 51. Which of the following is NOT an evolutionary adaptation in bacteria?
- They reproduce rapidly.
 - They have a high rate of mutation.
 - They cannot exist under adverse conditions.
 - They can utilize substances harmful to other organisms.
- ____ 52. Which of the following processes brings about an exchange of genetic information between bacterial cells?
- binary fission
 - mutualism
 - conjugation
 - replication
- ____ 53. A(n) _____ is a virus that infects a bacterial cell.
- endospore
 - decomposer
 - plasmid
 - bacteriophage
- ____ 54. Viruses are found in _____.
- air
 - water
 - soil
 - all of these
- ____ 55. Viruses are _____.
- producers
 - consumers
 - parasites
 - decomposers
- ____ 56. Penicillin kills bacteria by _____.
- consuming them
 - causing holes to develop in their cell walls
 - imprisoning them
 - depriving them of nutrients
- ____ 57. The name streptococcus tells you that the bacteria are arranged as _____.
- pairs of round cells
 - long chains of round cells
 - groups of spirals
 - chains of rods
- ____ 58. Economically important members of the phylum Oomycota include _____.
- plasmodial slime molds
 - cellular slime molds
 - water molds
 - all of these
- ____ 59. The funguslike protists that produce a multinucleate glob of cytoplasm are the _____.
- water molds
 - plasmodial slime molds
 - downy mildews
 - cellular slime molds
- ____ 60. The plantlike protists that are the cause of red tides are _____.
- red algae
 - dinoflagellates
 - brown algae
 - blue-green algae
- ____ 61. Members of the Kingdom Protista have _____.
- membrane-bound organelles
 - a wide variety of sizes and shapes
 - one or many cells
 - all of these
- ____ 62. A protozoan that moves by lashing one or more of its whiplike parts is a(n) _____.
- thallus
 - sporozoan
 - water mold
 - flagellate
- ____ 63. Which protist group produces much of the oxygen on Earth?
- diatoms
 - algae
 - water molds
 - slime molds
- ____ 64. Slime molds are said to be like animals during much of their life cycle because they _____.
- look like animals
 - reproduce by making spores
 - move about and engulf food
 - grow on rotting leaves or tree stumps

- ____ 65. Dinoflagellates are able to spin by means of ____.
- the cilia that emerge through their pellicle
 - two flagella at right angles to each other
 - a pillbox shell that opens and closes
 - a holdfast that attaches them to a rock
- ____ 66. During the gametophyte generation, a green alga ____.
- has the haploid number of chromosomes
 - has the diploid number of chromosomes
 - reproduces asexually
 - develops from a zygote
- ____ 67. Most sporozoans reproduce by ____.
- conjugation
 - sexual reproduction only
 - fragmentation
 - both sexual and asexual reproduction
- ____ 68. An amoeba engulfs food by ____.
- using its oral groove and the action of cilia
 - osmosis
 - surrounding the food with pseudopodia
 - forming cysts

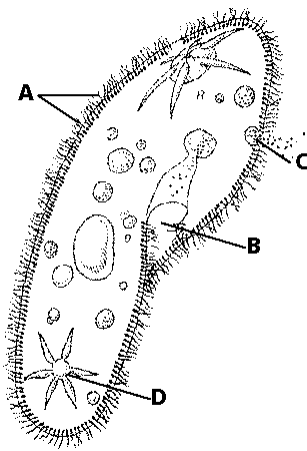


Figure 19-2

- ____ 69. Which structure shown in Figure 19-2 is used for locomotion?
- A
 - B
 - C
 - D
- ____ 70. Which structure shown in Figure 19-2 is used to extract waste?
- A
 - B
 - C
 - D

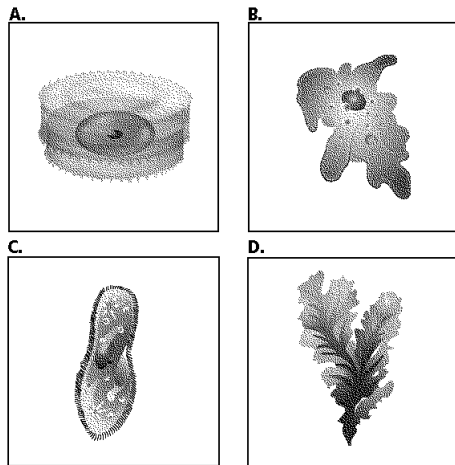


Figure 19-3

- _____ 71. Which of the protists shown in Figure 19-3 would use a pseudopod?
- a. A c. C
b. B d. D
- _____ 72. Which of the protists shown in Figure 19-3 has the hardest exterior?
- a. A c. C
b. B d. D

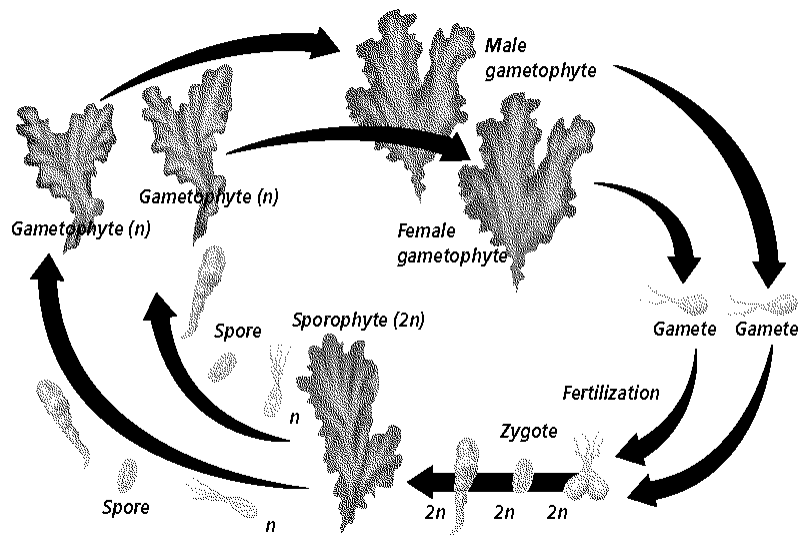


Figure 19-4

73. Which phase shown in Figure 19-4 is diploid?
- a. gametophyte
 - b. from the spore to the gametophyte
 - c. from the zygote to the sporophyte
 - d. male and female gametophytes
74. When does meiosis occur in Figure 19-4?
- a. when the gametes form
 - b. when the spores form
 - c. when the zygotes form
 - d. when the male and female gametophytes form

- ____ 75. When does mitosis occur in Figure 19-4?
- only as the zygote forms
 - only when the male and female gametophytes make the gametes
 - only as spores grow into gametophytes
 - any time there is cellular growth
- ____ 76. Fossils of fungi are rare due to ____.
- their late appearance on the Geologic Time Scale
 - their lack of species diversity
 - their composition of soft materials
 - their ability to form protective zygospores
- ____ 77. The bread mold, Rhizopus, produces sexual zygospores when ____.
- environmental conditions are unfavorable
 - environmental conditions are favorable
 - there is moist food
 - rhizoids are present
- ____ 78. In hyphae divided by septa, cytoplasm flows from one cell to the next through ____.
- haustoria
 - chitin
 - spores
 - pores

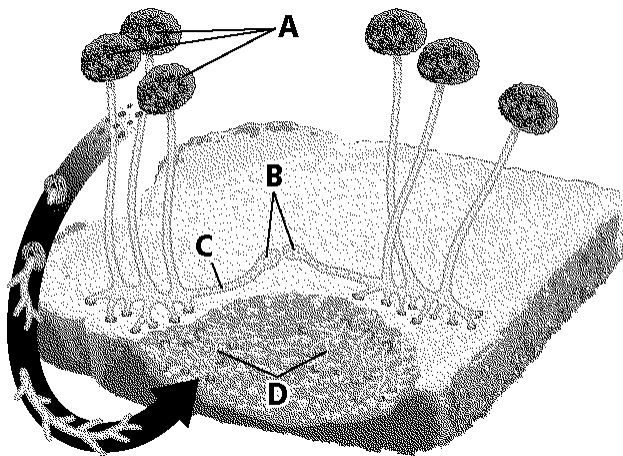


Figure 20-2

- ____ 79. In Figure 20-2, where are spores formed?
- A
 - B
 - C
 - D
- ____ 80. In Figure 20-2, which structures gather nutrients?
- A
 - B
 - C
 - D
- ____ 81. In Figure 20-2, what would cause a zygospore to form at B?
- moisture
 - unfavorable environmental conditions
 - an overabundance of food
 - heat

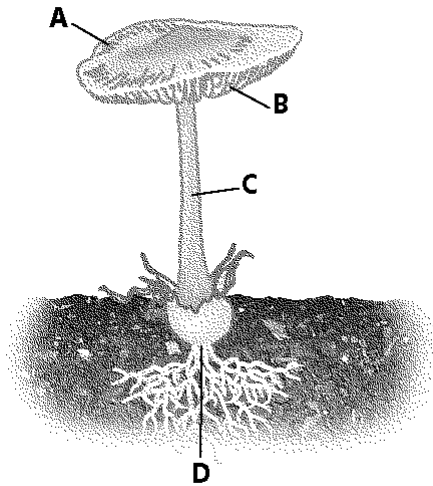


Figure 20-3

82. Where are spores released in the organism shown in Figure 20-3?
- a. A
 - b. B
 - c. C
 - d. D
83. Where does meiosis in the organism shown in Figure 20-3?
- a. A
 - b. B
 - c. C
 - d. D

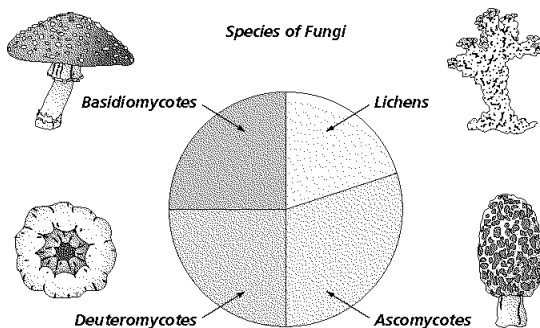


Figure 20-4

84. According to Figure 20-4, which type of fungi has the most species?
- a. deuteromycetes
 - b. basidiomycetes
 - c. lichens
 - d. ascomycotes
85. Mushrooms, which are basidiomycotes, make up what percentage of the fungi species, according to Figure 20-4?
- a. 4%
 - b. 20%
 - c. 25%
 - d. 50%
86. Plant cells all have a _____ composed of cellulose.
- a. cell wall
 - b. cell membrane
 - c. nucleus
 - d. cytoplasm
87. Both algae and plants store their food in the form of _____.
- a. glycogen
 - b. glucose
 - c. cellulose
 - d. proteins

- ___ 88. Which of the following are NOT considered non-seed plants?
- | | |
|-----------------|--------------------|
| a. Bryophytes | c. Anthocerophytes |
| b. Hepatophytes | d. Coniferophytes |
- ___ 89. Which of the following are considered BOTH a vascular and non-seed plant?
- | | |
|-----------------|-------------------|
| a. Bryophytes | c. Pterophytes |
| b. Hepatophytes | d. Coniferophytes |
- ___ 90. Although all plants produce spores only ___ produce flowers.
- | | |
|--------------------|-------------------|
| a. Anthophytes | c. Coniferophytes |
| b. Anthocerophytes | d. Ginkgophytes |

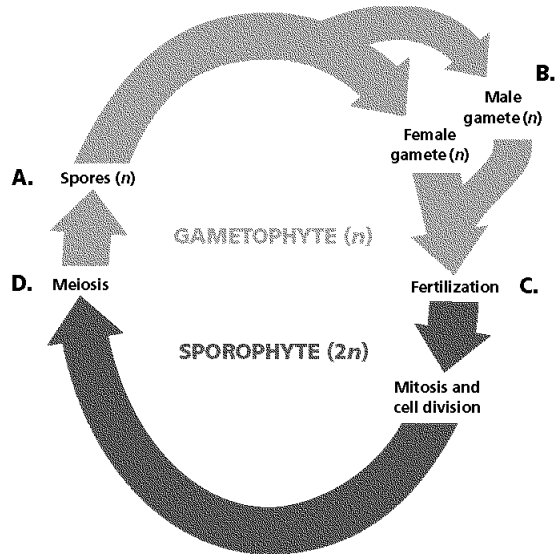


Figure 21-2

- ___ 91. Where does the sexual reproductive cycle begin in Figure 21-2?
- | | |
|------|------|
| a. A | c. C |
| b. B | d. D |
- ___ 92. Where does the asexual reproductive cycle begin in Figure 21-2?
- | | |
|------|------|
| a. A | c. C |
| b. B | d. D |
- ___ 93. Where are seeds developed in Figure 21-2?
- | | |
|------|------|
| a. A | c. C |
| b. B | d. D |

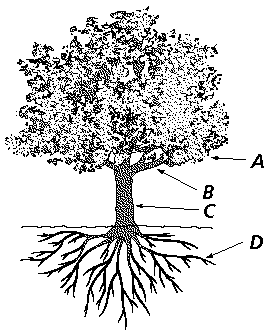


Figure 21-3

- ____ 104. The female reproductive structure of nonvascular plants is called a(n) ____.
- antheridia
 - archegonia
 - rhizoid
 - pinnae
- ____ 105. Anthophytes that live for only one year or less are called ____.
- annuals
 - biennials
 - perennials
 - dicots
- ____ 106. Horsetails are ____.
- bryophytes
 - arthrophytes
 - lycophytes
 - pterophytes
- ____ 107. Which of the following is not a dicotyledon?
- lettuce
 - maple tree
 - grass
 - dandelion
- ____ 108. An anthophyte differs from a conifer in that ____.
- it is deciduous
 - it produces seeds
 - its seeds are enclosed in a fruit
 - it has vascular tissue

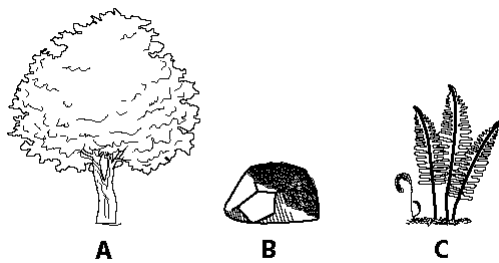


Figure 22-2

- ____ 109. Which of the plants shown in Figure 22-2 uses alternation of generations to reproduce?
- A
 - B
 - C
 - all of them
- ____ 110. Which of the plants shown in Figure 22-2 uses seeds to reproduce?
- A
 - B
 - C
 - all of them
- ____ 111. Which reproductive process is NOT used by all three of the plants shown in Figure 22-2?
- sexual
 - asexual
 - gametophyte
 - fruit generation
- ____ 112. Which of the plants shown in Figure 22-2 has a dominant gametophyte generation?
- A
 - B
 - C
 - all of them



Figure 22-3

- ____ 113. What type of plant died out in the time marked B in the timeline shown in Figure 22-3?
- nonvascular plants
 - vascular plants
 - seed plants
 - non-seed vascular plants

- ___ 114. What type of plant is completely extinct at point C in the timeline shown in Figure 22-3?
- a. nonvascular plants
 - b. vascular plants
 - c. conifers
 - d. none of the above

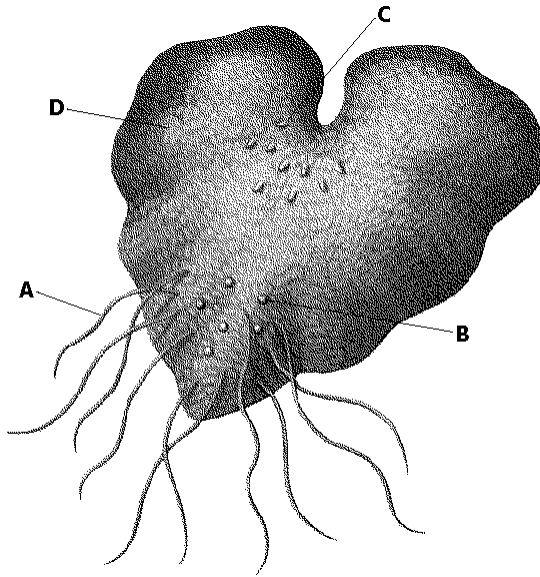


Figure 22-4

- ___ 115. Where are the male gametophytes produced in Figure 22-4?
- a. A
 - b. B
 - c. C
 - d. D
- ___ 116. Where is the structure shown in Figure 22-4 located?
- a. in the leaves
 - b. in the stalk
 - c. in the ground
 - d. in the root

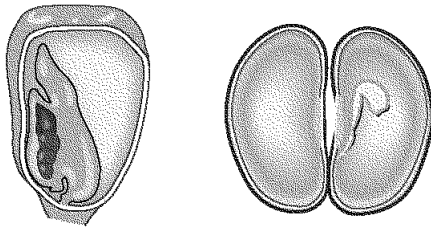


Figure 22-5

- ___ 117. How are the vascular tissues bundled in the stalks of the seed shown to the left in Figure 22-5?
- a. scattered
 - b. in a ring
 - c. net-like
 - d. they do not exist
- ___ 118. You pick a flower off the plant that produced the seed shown to the right in Figure 22-5. What is a possible number of petals this flower could have?
- a. 3
 - b. 6
 - c. 7
 - d. 8

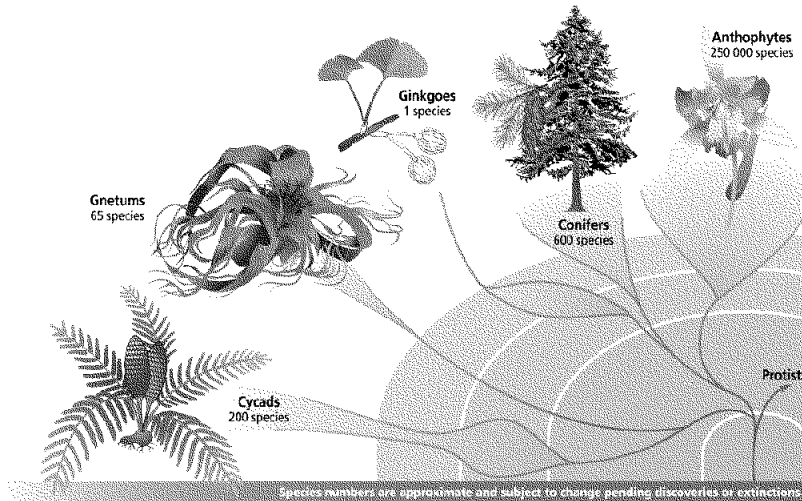


Figure 22-6

- ____ 119. According to Figure 22-6, which species was the fastest to differentiate from the rest of the ones shown?
- conifers and ginkos
 - anthophytes
 - gnetums and cycads
 - anthophytes, conifers, and ginkos
- ____ 120. What can be inferred from Figure 22-6?
- anthophytes are the most common seed plants
 - ginkos only grow in one area of the world
 - there used to be more than one species of ginkos
 - seed plants are more closely related to protists than non-seed plants

Completion

Complete each statement.

- Structures called _____, capable of growth and metabolism, have been produced in the laboratory. Structures like these may have eventually evolved into heterotrophic prokaryotes.
- Organisms known as _____ are chemosynthetic autotrophs that survive in harsh conditions where there is little sunlight or oxygen.
- The evolution of an ancestral species into an array of species that occupy diverse habitats is called _____.
- Any structure that is reduced in function in a living organism but may have been used in an ancestor is known as a(n) _____.
- The concept that evolution occurs over long periods of stability that are interrupted by geologically brief periods of change is known as _____.
- _____ is a mechanism for change in a population in which organisms with favorable variations live, reproduce, and pass on their favorable traits.
- Any species with a multiple set of chromosomes is known as a(n) _____.
- _____ is the type of selection that favors average individuals in a population.
- The alteration of allelic frequencies by chance processes is known as _____.
- The _____ is the percentage of a particular allele in a population.

131. The total number of genes present in a population is the _____.
132. A variety of structural adaptations called _____ provides protection for an organism by copying the appearance of another species.
133. A structural adaptation enabling an organism to blend in with its environment is _____.
134. _____ is a technique in which the breeder selects particular traits.
135. The language used for scientific names is _____ because it does not change.
136. Aristotle classified animals according to their _____ and _____.
137. Scientists used a system of _____ to help understand the relationships between organisms.

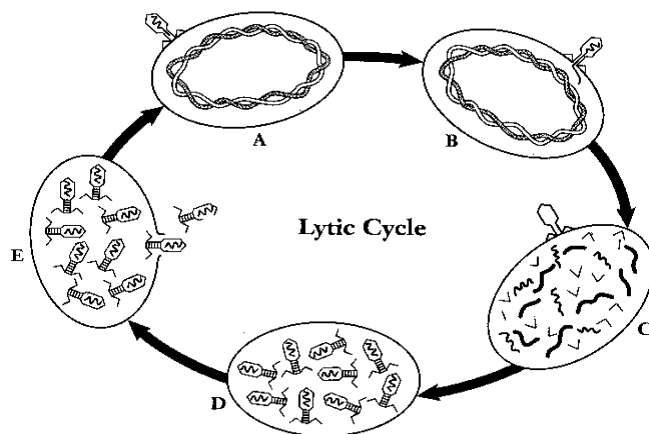


Figure 18-1

138. The virus attaching to a host cell is shown in stage _____ of Figure 18-1.
139. Virus injecting its nucleic acid into the host cell is shown in stage _____ of Figure 18-1.
140. The host cell breaks open, and the new virus particles are released, as shown in stage _____ of Figure 18-1.
141. The host DNA is destroyed, and the viral genes are copied as shown in stage _____ of Figure 18-1.
142. Most photosynthesis occurs in the _____ of the plant.
143. The waxy, waterproof covering found on the plant stems and leaves is called the _____.
144. The alternating stages of a plant's life cycle are the _____ stage and the _____ stage.
145. Some plants such as radishes and sweet potatoes store starch reserves in their _____.
146. Nonvascular plants have to rely on _____ and _____ for transport of their water and nutrients.
147. _____ are small bryophytes with leafy stems that usually grow in dense carpets or tufts.
148. Nonvascular plants must have adaptations to keep them from _____.
149. The earliest known plant fossils are called _____.
150. One billion years ago the _____ found in inland seas and oceans were the ancestors of modern plants.

Bio-10-Q2W8-Quarter 2 Rvision Qs.Bank Answer Section

MULTIPLE CHOICE

- | | | | |
|---------------------------------|--------|--------|-----------|
| 1. ANS: B
NAT: C3 C6 D2 | PTS: 1 | DIF: B | OBJ: 14-4 |
| 2. ANS: B
NAT: C1 C3 C6 | PTS: 1 | DIF: B | OBJ: 14-3 |
| 3. ANS: B
NAT: C1 C3 C6 | PTS: 1 | DIF: B | OBJ: 14-3 |
| 4. ANS: A
NAT: C1 C3 C6 | PTS: 1 | DIF: B | OBJ: 14-3 |
| 5. ANS: A
NAT: C3 C6 G1 | PTS: 1 | DIF: B | OBJ: 14-2 |
| 6. ANS: D
NAT: C3 C6 G1 | PTS: 1 | DIF: B | OBJ: 14-2 |
| 7. ANS: D
NAT: C3 C6 G1 | PTS: 1 | DIF: B | OBJ: 14-1 |
| 8. ANS: B
NAT: C3 C6 G1 | PTS: 1 | DIF: B | OBJ: 14-1 |
| 9. ANS: C
NAT: C3 C6 G1 | PTS: 1 | DIF: B | OBJ: 14-1 |
| 10. ANS: D
NAT: C1 C3 C6 | PTS: 1 | DIF: B | OBJ: 14-5 |
| 11. ANS: B
NAT: C3 C6 D2 | PTS: 1 | DIF: B | OBJ: 14-4 |
| 12. ANS: A
NAT: C3 C6 G1 | PTS: 1 | DIF: B | OBJ: 14-1 |
| 13. ANS: B
NAT: C3 C6 G1 | PTS: 1 | DIF: B | OBJ: 14-1 |
| 14. ANS: B
NAT: C3 C6 D2 | PTS: 1 | DIF: B | OBJ: 14-4 |
| 15. ANS: C
NAT: C1 C3 C6 | PTS: 1 | DIF: B | OBJ: 14-5 |
| 16. ANS: B
NAT: C3 C6 G1 | PTS: 1 | DIF: A | OBJ: 14-2 |
| 17. ANS: D
NAT: C3 C6 G1 | PTS: 1 | DIF: A | OBJ: 14-2 |
| 18. ANS: A
NAT: C3 C6 G1 | PTS: 1 | DIF: A | OBJ: 14-2 |
| 19. ANS: A
NAT: C6 F4 G1 | PTS: 1 | DIF: B | OBJ: 15-6 |
| 20. ANS: A
NAT: C6 F4 G1 | PTS: 1 | DIF: B | OBJ: 15-6 |
| 21. ANS: D
NAT: C3 C6 F4 | PTS: 1 | DIF: B | OBJ: 15-2 |

22.	ANS: A NAT: C3 C6 F4	PTS: 1	DIF: B	OBJ: 15-2
23.	ANS: C NAT: C3 G1 G3	PTS: 1	DIF: B	OBJ: 15-3
24.	ANS: D NAT: C3 C6 G3	PTS: 1	DIF: B	OBJ: 15-1
25.	ANS: B NAT: C6 F4 G1	PTS: 1	DIF: B	OBJ: 15-6
26.	ANS: B NAT: C2 C4 G1	PTS: 1	DIF: B	OBJ: 15-4
27.	ANS: C NAT: C2 C4 G1	PTS: 1	DIF: B	OBJ: 15-4
28.	ANS: C NAT: C2 C4 G1	PTS: 1	DIF: B	OBJ: 15-4
29.	ANS: C NAT: C3 G1 G3	PTS: 1	DIF: B	OBJ: 15-3
30.	ANS: A NAT: C3 C6 F4	PTS: 1	DIF: B	OBJ: 15-2
31.	ANS: D NAT: C3 C6 G3	PTS: 1	DIF: B	OBJ: 15-1
32.	ANS: A NAT: C3 C6 G3	PTS: 1	DIF: B	OBJ: 15-1
33.	ANS: B NAT: C6 F4 G1	PTS: 1	DIF: B	OBJ: 15-5
34.	ANS: C NAT: C6 F4 G1	PTS: 1	DIF: B	OBJ: 15-5
35.	ANS: C NAT: C6 F4 G1	PTS: 1	DIF: B	OBJ: 15-5
36.	ANS: D NAT: C2 C4 G1	PTS: 1	DIF: B	OBJ: 15-4
37.	ANS: B NAT: C3 C6 F4	PTS: 1	DIF: B	OBJ: 15-2
38.	ANS: C NAT: C3 G1 G3	PTS: 1	DIF: B	OBJ: 15-3
39.	ANS: C NAT: C2 C4 G1	PTS: 1	DIF: A	OBJ: 15-4
40.	ANS: A NAT: C6 F4 G1	PTS: 1	DIF: A	OBJ: 15-5
41.	ANS: A NAT: C3 C5 G3	PTS: 1	DIF: B	OBJ: 17-2
42.	ANS: B NAT: C3 C5 G3	PTS: 1	DIF: B	OBJ: 17-1
43.	ANS: C NAT: C3 C5	PTS: 1	DIF: B	OBJ: 17-6
44.	ANS: C NAT: C3 C5 G3	PTS: 1	DIF: B	OBJ: 17-3
45.	ANS: D NAT: C3 C5 G3	PTS: 1	DIF: B	OBJ: 17-1
46.	ANS: B	PTS: 1	DIF: B	OBJ: 17-4

	NAT: C3 C5			
47.	ANS: A	PTS: 1	DIF: B	OBJ: 17-5
	NAT: C3 C5			
48.	ANS: D	PTS: 1	DIF: B	OBJ: 18-3
	NAT: C1 C4 C5			
49.	ANS: D	PTS: 1	DIF: B	OBJ: 18-5
	NAT: C1 C4 C5			
50.	ANS: B	PTS: 1	DIF: B	OBJ: 18-4
	NAT: C1 C4 C5			
51.	ANS: C	PTS: 1	DIF: B	OBJ: 18-4
	NAT: C1 C4 C5			
52.	ANS: C	PTS: 1	DIF: B	OBJ: 18-4
	NAT: C1 C4 C5			
53.	ANS: D	PTS: 1	DIF: B	OBJ: 18-1
	NAT: A1 C3 C5			
54.	ANS: D	PTS: 1	DIF: B	OBJ: 18-1
	NAT: A1 C3 C5			
55.	ANS: C	PTS: 1	DIF: B	OBJ: 18-1
	NAT: A1 C3 C5			
56.	ANS: B	PTS: 1	DIF: B	OBJ: 18-4
	NAT: C1 C4 C5			
57.	ANS: B	PTS: 1	DIF: B	OBJ: 18-4
	NAT: C1 C4 C5			
58.	ANS: C	PTS: 1	DIF: B	OBJ: 19-6
	NAT: C3 C5 F1			
59.	ANS: B	PTS: 1	DIF: B	OBJ: 19-5
	NAT: C1 C3 C5			
60.	ANS: B	PTS: 1	DIF: B	OBJ: 19-3
	NAT: C1 C4 C6			
61.	ANS: D	PTS: 1	DIF: B	OBJ: 19-1
	NAT: C1 C4 C6			
62.	ANS: D	PTS: 1	DIF: B	OBJ: 19-2
	NAT: C1 C4 C6			
63.	ANS: B	PTS: 1	DIF: B	OBJ: 19-4
	NAT: C1 C4 C5			
64.	ANS: C	PTS: 1	DIF: B	OBJ: 19-5
	NAT: C1 C3 C5			
65.	ANS: B	PTS: 1	DIF: B	OBJ: 19-2
	NAT: C1 C4 C6			
66.	ANS: A	PTS: 1	DIF: B	OBJ: 19-4
	NAT: C1 C4 C5			
67.	ANS: D	PTS: 1	DIF: B	OBJ: 19-2
	NAT: C1 C4 C6			
68.	ANS: C	PTS: 1	DIF: B	OBJ: 19-2
	NAT: C1 C4 C6			
69.	ANS: A	PTS: 1	DIF: B	OBJ: 19-1
	NAT: C1 C4 C6			
70.	ANS: C	PTS: 1	DIF: B	OBJ: 19-1
	NAT: C1 C4 C6			

71.	ANS: B NAT: C1 C4 C6	PTS: 1	DIF: A	OBJ: 19-2
72.	ANS: A NAT: C1 C4 C6	PTS: 1	DIF: A	OBJ: 19-2
73.	ANS: C NAT: C1 C4 C5	PTS: 1	DIF: A	OBJ: 19-4
74.	ANS: B NAT: C1 C4 C5	PTS: 1	DIF: A	OBJ: 19-4
75.	ANS: D NAT: C1 C4 C5	PTS: 1	DIF: A	OBJ: 19-4
76.	ANS: C NAT: C4 C6 F5	PTS: 1	DIF: B	OBJ: 20-1
77.	ANS: A NAT: C4 C5 C6	PTS: 1	DIF: B	OBJ: 20-4
78.	ANS: D NAT: C4 C6 F5	PTS: 1	DIF: B	OBJ: 20-1
79.	ANS: A NAT: C4 C5 C6	PTS: 1	DIF: A	OBJ: 20-4
80.	ANS: D NAT: C4 C5 C6	PTS: 1	DIF: A	OBJ: 20-4
81.	ANS: B NAT: C4 C5 C6	PTS: 1	DIF: A	OBJ: 20-4
82.	ANS: B NAT: C4 C5 C6	PTS: 1	DIF: A	OBJ: 20-4
83.	ANS: B NAT: C4 C5 C6	PTS: 1	DIF: A	OBJ: 20-4
84.	ANS: D NAT: F1 F4 F5	PTS: 1	DIF: A	OBJ: 20-5
85.	ANS: C NAT: F1 F4 F5	PTS: 1	DIF: A	OBJ: 20-5
86.	ANS: A NAT: C5 C6 F3	PTS: 1	DIF: B	OBJ: 21-1
87.	ANS: B NAT: C5 C6 F3	PTS: 1	DIF: B	OBJ: 21-1
88.	ANS: D NAT: C5 E2 F1	PTS: 1	DIF: B	OBJ: 21-5
89.	ANS: C NAT: C5 E2 F1	PTS: 1	DIF: B	OBJ: 21-5
90.	ANS: A NAT: C5 E2 F1	PTS: 1	DIF: B	OBJ: 21-5
91.	ANS: D NAT: F3 F4 F6	PTS: 1	DIF: B	OBJ: 21-3
92.	ANS: C NAT: F3 F4 F6	PTS: 1	DIF: B	OBJ: 21-3
93.	ANS: C NAT: F3 F4 F6	PTS: 1	DIF: A	OBJ: 21-3
94.	ANS: D NAT: C5 F3 F4	PTS: 1	DIF: A	OBJ: 21-2

95.	ANS: B NAT: C5 F3 F4	PTS: 1	DIF: A	OBJ: 21-2
96.	ANS: A NAT: C5 F3 F4	PTS: 1	DIF: A	OBJ: 21-2
97.	ANS: C NAT: C5 F3 F4	PTS: 1	DIF: A	OBJ: 21-2
98.	ANS: B NAT: C1 C5 G1	PTS: 1	DIF: B	OBJ: 22-2
99.	ANS: A NAT: C1 C3 C5	PTS: 1	DIF: B	OBJ: 22-3
100.	ANS: B NAT: C1 C3 C5	PTS: 1	DIF: B	OBJ: 22-4
101.	ANS: D NAT: C1 C3 C5	PTS: 1	DIF: B	OBJ: 22-4
102.	ANS: A NAT: C1 C3 C5	PTS: 1	DIF: B	OBJ: 22-5
103.	ANS: C NAT: C1 C3 C5	PTS: 1	DIF: B	OBJ: 22-4
104.	ANS: B NAT: C1 C5 G1	PTS: 1	DIF: B	OBJ: 22-1
105.	ANS: A NAT: C1 C5 G1	PTS: 1	DIF: B	OBJ: 22-2
106.	ANS: B NAT: C1 C3 C5	PTS: 1	DIF: B	OBJ: 22-4
107.	ANS: C NAT: C1 C3 C5	PTS: 1	DIF: B	OBJ: 22-5
108.	ANS: C NAT: C1 C3 C5	PTS: 1	DIF: B	OBJ: 22-5
109.	ANS: D NAT: C1 C5 G1	PTS: 1	DIF: B	OBJ: 22-2
110.	ANS: A NAT: C1 C5 G1	PTS: 1	DIF: B	OBJ: 22-2
111.	ANS: D NAT: C1 C3 C5	PTS: 1	DIF: A	OBJ: 22-4
112.	ANS: C NAT: C1 C5 G1	PTS: 1	DIF: A	OBJ: 22-2
113.	ANS: D NAT: C1 C3 C5	PTS: 1	DIF: A	OBJ: 22-4
114.	ANS: D NAT: C1 C3 C5	PTS: 1	DIF: A	OBJ: 22-3
115.	ANS: B NAT: C1 C3 C5	PTS: 1	DIF: B	OBJ: 22-4
116.	ANS: C NAT: C1 C3 C5	PTS: 1	DIF: B	OBJ: 22-4
117.	ANS: A NAT: C1 C3 C5	PTS: 1	DIF: B	OBJ: 22-5
118.	ANS: D NAT: C1 C3 C5	PTS: 1	DIF: A	OBJ: 22-5
119.	ANS: C	PTS: 1	DIF: A	OBJ: 22-5

NAT: C1 | C3 | C5
 120. ANS: C PTS: 1 DIF: A OBJ: 22-5
 NAT: C1 | C3 | C5

COMPLETION

121. ANS: protocells
 PTS: 1 DIF: B OBJ: 14-4 NAT: C3 | C6 | D2
 122. ANS: archaeobacteria
 PTS: 1 DIF: B OBJ: 14-5 NAT: C1 | C3 | C6
 123. ANS: adaptive radiation
 PTS: 1 DIF: B OBJ: 15-6 NAT: C6 | F4 | G1
 124. ANS: vestigial structure
 PTS: 1 DIF: B OBJ: 15-3 NAT: C3 | G1 | G3
 125. ANS: punctuated equilibrium
 PTS: 1 DIF: B OBJ: 15-5 NAT: C6 | F4 | G1
 126. ANS: Natural selection
 PTS: 1 DIF: B OBJ: 15-1 NAT: C3 | C6 | G3
 127. ANS: polyploid
 PTS: 1 DIF: B OBJ: 15-5 NAT: C6 | F4 | G1
 128. ANS: Stabilizing selection
 PTS: 1 DIF: B OBJ: 15-4 NAT: C2 | C4 | G1
 129. ANS: genetic drift
 PTS: 1 DIF: B OBJ: 15-5 NAT: C6 | F4 | G1
 130. ANS: allelic frequency
 PTS: 1 DIF: B OBJ: 15-5 NAT: C6 | F4 | G1
 131. ANS: gene pool
 PTS: 1 DIF: B OBJ: 15-4 NAT: C2 | C4 | G1
 132. ANS: mimicry
 PTS: 1 DIF: B OBJ: 15-2 NAT: C3 | C6 | F4
 133. ANS: camouflage
 PTS: 1 DIF: B OBJ: 15-2 NAT: C3 | C6 | F4
 134. ANS: Artificial selection
 PTS: 1 DIF: B OBJ: 15-5 NAT: C6 | F4 | G1
 135. ANS: Latin

136.	PTS: 1 ANS: habitat, physical differences	DIF: B	OBJ: 17-1	NAT: C3 C5 G3
137.	PTS: 1 ANS: classification	DIF: B	OBJ: 17-1	NAT: C3 C5 G3
138.	PTS: 1 ANS: A	DIF: B	OBJ: 17-1	NAT: C3 C5 G3
139.	PTS: 1 ANS: B	DIF: B	OBJ: 18-2	NAT: A1 C3 C5
140.	PTS: 1 ANS: E	DIF: B	OBJ: 18-2	NAT: A1 C3 C5
141.	PTS: 1 ANS: C	DIF: B	OBJ: 18-2	NAT: A1 C3 C5
142.	PTS: 1 ANS: leaves	DIF: B	OBJ: 18-2	NAT: A1 C3 C5
143.	PTS: 1 ANS: cuticle	DIF: B	OBJ: 21-2	NAT: C5 F3 F4
144.	PTS: 1 ANS: gametophyte, sporophyte	DIF: B	OBJ: 21-2	NAT: C5 F3 F4
145.	PTS: 1 ANS: roots	DIF: B	OBJ: 21-3	NAT: F3 F4 F6
146.	PTS: 1 ANS: osmosis, diffusion	DIF: B	OBJ: 21-2	NAT: C5 F3 F4
147.	PTS: 1 ANS: Mosses	DIF: B	OBJ: 21-4	NAT: C4 C6 E2
148.	PTS: 1 ANS: drying out	DIF: B	OBJ: 21-5	NAT: C5 E2 F1
149.	PTS: 1 ANS: psilophytes	DIF: B	OBJ: 21-2	NAT: C5 F3 F4
150.	PTS: 1 ANS: algae	DIF: B	OBJ: 21-2	NAT: C5 F3 F4
	PTS: 1	DIF: B	OBJ: 21-2	NAT: C5 F3 F4